Merritt Parkway, Huntington Turnpike/Route 108 Bridge Spanning the Merritt Parkway at the 33.73 mile mark Trumbull Fairfield County Connecticut HAER No. CT-124

HAER CONN, I-TRUM, 4-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service U.S. Department of the Interior P.O. Box 37127 Washington, D.C. 20013-7127

CARNA CANNA 1-TRUM

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway,

Huntington Turnpike/Route 108

Bridge

HAER No. CT-124

Location:

Spanning the Merritt Parkway at the 33.73 mile mark in Trumbull, Fairfield

County, Connecticut

UTM:

18.654010.4566535

Quad: Bridgeport, Connecticut

Construction Date:

1940

Engineer:

Connecticut Highway Department

Architect:

George L. Dunkelberger, of the Connecticut Highway Department, acted as head

architect for all Merritt Parkway bridges.

Contractor:

Mariani Construction Company

New Haven, Connecticut

Present Owner:

Connecticut Department of Transportation

Wethersfield, Connecticut

Present Use:

Demolished c. 1979

Significance:

The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge

design and the individuality of each structure, makes them distinctive.

Historians:

Todd Thibodeau, HABS/HAER Historian

Corinne Smith, HAER Engineer

August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1668, there were only five settlers living beyond the two-mile limit of the Stratford meeting house. Shortly after this date, the land north of Stratford was surveyed, laid out and assigned to individuals. It is unknown if anyone settled there before Abraham Nichols and his family arrived from Stratford in 1690. Other families soon followed, creating a district known as Nichols Farms.¹

As the population increased, the desire for a local church and government became evident. In 1725, Nichols Farms residents petitioned the General Court for village privileges and a committee was named to view their case. The General Assembly acted in favor of their petition and in October 1725 the Assembly granted the residents of Nichols Farms the "liberty of village privileges," as the Society of Unity. Unity was still a part of Stratford, but could maintain its own meeting house and school, through a local tax.²

At the same time, residents from Fairfield were clearing lands west of Unity. This area came to be known as the Long Hill region and faced many of the same problems as Nichols Farms. These settlers were forced to pay for a church and school that were too far away for them to use.³

In 1740 the General Assembly granted the Long Hill region an exemption from paying taxes for the school and meeting house in Stratfield, between December and mid March. Furthermore, Long Hill was allowed to develop its own meeting house during these months. Thus, the Winter Society of Long Hill was created; this arrangement continued for four years.

¹History of Trumbull: Dodrasquicentennial, 1797-1972, (Trumbull: Trumbull Historical Society, Inc., 1972), 25.

²History of Trumbull: Dodrasquicentennial, 26.

³David A. Cronin, "History of Trumbull, Connecticut," <u>Historical Sketches of Trumbull</u>, <u>Connecticut: Tercentury Celebration</u>, (Trumbull: The Trumbull Historical Committee, 1935), 5.

In 1744, the parishes of Unity and Long Hill, only five miles apart, were consolidated into the Society of North Stratford. The new society functioned in virtually the same manor as the Unity parish. As they were now allowed to manage their own religious and educational affairs, residents became anxious to obtain complete independence from Stratford. For more than fifty years North Stratford sought to become an individual township. In October 1797, the General Assembly passed the "Trumbull Bill" establishing the Society of North Stratford as the town of Trumbull.⁴

The Boston Post Road and the main line of the railroad both passed to the south of Trumbull, isolating the community as a rural farming region until the completion of the Merritt Parkway in 1940. Trumbull was the location the Connecticut Highway Department's main field office during the construction of the Merritt Parkway.

BRIDGE CONSTRUCTION HISTORY

The Huntington Turnpike starts at East Main Street in Bridgeport and proceeds north to the town of Huntington. Historically this road was the primary link between Bridgeport and agricultural community of Nichols Farm. The Peter Mitchell Construction Company of Greenwich, CT, received the contract to grade the Merritt Parkway from the Huntington Turnpike, in Trumbull, to the Cutspring Road, in Stratford (ConnDot project #180-130). While the Huntington Turnpike/Route 108 Bridge is located within this section of the Merritt, the grade separation and bridge contract went to the Mariani Construction Company of New Haven, CT (ConnDot project #180-111). The bridge cost \$52,716 and

⁴History of Trumbull: Dodrasquicentennial, 28.

⁵Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

HAER No. CT-124 (page 4)

was completed in 1940.⁶ The paving work for this region of the Merritt also extended from Main Street/Route 25 to Cutspring Road. This contract was awarded to the Osborn-Barnes Construction Company of Danbury, CT (ConnDot project #180-169). The Huntington Turnpike Bridge was demolished in 1979 and replaced with a modern interchange in 1983.⁷ The cast-iron grapevine grilles from the original bridge have been attached to the abutments of the present Route 108 bridge. The Town of Trumbull seal from the railing of the bridge is now in a park at the intersection of Huntington Turnpike and Shelton Road.

BRIDGE DESCRIPTION

The Huntington Turnpike Bridge was a single-span, reinforced-concrete, barrel-type rigid-frame bridge spanning 53'. The Merritt Parkway traveled over the bridge at a skew of 15°-54'-20". Parallel wing walls, 53' long, formed the approach for the overpass.

The rigid-frame design allowed the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rose 4'-5-1/4" from the springline to the crown, while the extrados rose 1'-10" from the knee to the crown. The frame thickness at the crown was 18". The outside of the knee is curved, and the inside of the knee is a corner with an obtuse angle. The frame leg thickness increased from 27" at the base to over 50" at the knee. The exposed face of the legs remained vertical, and the hidden face sloped away from the roadway.

Huntington Turnpike/Route 108 Bridge; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

Huntington Turnpike Bridge; Bridge Maintenance File.

The Huntington Turnpike Bridge design utilized precast concrete, molded concrete, and metal details for several grapevine patterns on the bridge. The solid railing was provided with niches for 6'-long precast panels with a bas-relief of flowers and vines. The center of the railing was arched to contain a round seal for the Town of Trumbull with the date of 1797 and the figure of a colonial man. The seal and its flanking floral panels were formed with a reverse mold in the concrete formwork. The pylons support malleable cast iron grilles that were cast in Certrock, a material similar to plaster of Paris, for strength and hardness after casting.⁸ A minimum thickness of 1-1/4" resulted in three sections, each weighing 1000 pounds, for each grille of grapevines.

BIBLIOGRAPHY

- Beach, E. Merrill. <u>Trumbull: Church and Town, A History of the Colonial Town of Trumbull and of its Church</u>. Trumbull: The Trumbull Historical Society, Inc., 1972.
- Cronin, David A. "History of Trumbull, Connecticut." <u>Historical Sketches of Trumbull, Connecticut:</u> <u>Tercentury Celebration</u>. Trumbull: Trumbull Historical Committee, 1935.
- ------. <u>History of Trumbull: Dodrasquicentennial, 1797-1972</u>. Trumbull: The Trumbull Historical Society, Inc., 1972.
- ------. Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- ------- Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

George L. Dunkelberger, "Highway Architecture," <u>Connecticut Society of Civil Engineers Annual</u> 12(1942): 130.

Merritt Parkway, Huntington Turnpike/Route 108 Bridge HAER No. CT-124 (page 6)

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.